Mine Safety and Health Admin., Labor

- 77.1905 Hoist safeguards: general.
- 77.1906 Hoists; daily inspection.
- 77.1907 Hoist construction; general.
- 77.1908 Hoist installations; use.
- 77.1908-1 Hoist operation; qualified hoistman.
- 77.1909 Explosives and blasting; use of permissible explosives and shot-firing units.
- 77.1909-1 Use of nonpermissible explosives and nonpermissible shot-firing units; approval by Health and Safety District Manager.
- 77.1910 Explosives and blasting; general.
- 77.1911 Ventilation of slopes and shafts.
- 77.1912 Ladders and stairways.
- 77.1913 Fire-resistant wood.
- 77.1914 Electrical equipment.
- 77.1915 Storage and handling of combustible materials.
- 77.1916 Welding, cutting, and soldering; fire protection.

Subpart U—Approved Books and Records [Reserved]

AUTHORITY: 30 U.S.C. 811.

Source: $36\ FR\ 9364$, May 22, 1971, unless otherwise noted.

Subpart A—General

§ 77.1 Scope.

This part 77 sets forth mandatory safety standards for bituminous, anthracite, and lignite surface coal mines, including open pit and auger mines, and to the surface work areas of underground coal mines, pursuant to section 101(i) of the Federal Mine Safety and Health Act of 1977.

[36 FR 9364, May 22, 1971, as amended at 43 FR 12320, Mar. 24, 1978]

§ 77.2 Definitions.

For the purpose of this part 77, the term:

- (a) Active workings means any place in a coal mine where miners are normally required to work or travel;
- (b) American Table of Distances means the current edition of "The American Table of Distances for Storage of Explosives" published by the Institute of Makers of Explosives;
- (c) Barricaded means to obstruct passage of persons, vehicles, or flying materials;
- (d) *Berm* means a pile or mound of material capable of restraining a vehicle;

- (e) *Blasting agent* means any material consisting of a mixture of a fuel and oxidizer which—
- (1) Is used or intended for use in blasting;
- (2) Is not classed as an explosive by the Department of Transportation;
- (3) Contains no ingredient classed as an explosive by the Department of Transportation; and,
- (4) Cannot be detonated by a No. 8 blasting cap when tested as recommended in Bureau of Mines Information Circular 8179.
- (f) Blasting area means the area near blasting operations in which concussion or flying material can reasonably be expected to cause injury.
- (g) *Blasting cap* means a detonator containing a charge of detonating compound, which is ignited by electric current, or the spark of a fuse. Used for detonating explosives.
- (h) *Blasting circuit* means electric circuits used to fire electric detonators or to ignite an igniter cord by means of an electric starter.
- (i) Blasting switch means a switch used to connect a power source to a blasting circuit.
- (j) Box-type magazine means a small, portable magazine used to store limited quantities of explosives or detonators for short periods of time in locations at the mine which are convenient to the blasting sites at which they will be used.
- (k) Capped fuse means a length of safety fuse to which a detonator has been attached.
- (l) Capped primer means a package or cartridge of explosives which is specifically designed to transmit detonation to other explosives and which contains a detonator.
- (m) Certified or registered, as applied to any person means a person certified or registered by the State in which the coal mine is located to perform duties prescribed by this Part 77, except that, in a State where no program of certification or registration is provided or where the program does not meet at least minimum Federal standards established by the Secretary, such certification or registration shall be by the Secretary.

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- (n) *Detonating cord* or *detonating fuse* means a flexible cord containing a core of high explosive.
- (o) *Detonator* means a device containing a small detonating charge that is used for detonating an explosive, including, but not limited to blasting caps, exploders, electric detonators, and delay electric blasting caps.
- (p) *Electrical grounding* means to connect with the ground to make the earth part of the circuit.
- (q) Explosive means any chemical compound, mixture, or device, the primary or common purpose of which is to function by explosion. Explosives include, but are not limited to black powder, dynamite, nitroglycerin, fulminate, ammonium nitrate when mixed with a hydrocarbon, and other blasting agents.
- (r) Flash point means the minimum temperature at which sufficient vapor is released by a liquid or solid to form a flammable vapor-air mixture at atmospheric pressure.
- (s) Low voltage means up to and including 660 volts, medium voltage means voltages from 661 to 1,000 volts, and high voltage means more than 1,000 volts.
- (t) *Misfire* means the complete or partial failure of a blasting charge to explode as planned.
- (u) *Primer* or *Booster* means a package or cartridge of explosive which is designed specifically to transmit detonation to other explosives and which does not contain a detonator.
- (v) Qualified person means, as the context requires.
- (1) An individual deemed qualified by the Secretary and designated by the operator to make tests and examinations required by this Part 77; and,
- (2) An individual deemed, in accordance with the minimum requirements to be established by the Secretary, qualified by training, education, and experience, to perform electrical work, to maintain electrical equipment, and to conduct examinations and make tests of all electrical equipment.
- (w) Roll protection means a framework, safety canopy, or similar protection for the operator when equipment overturns.
- (x) Safety can means an approved container, of not over 5 gallons capacity,

having a spring-closing lid and spout cover.

- (y) Safety fuse means a train of powder enclosed in cotton, jute yarn, and waterproofing compounds, which burns at a uniform rate; used for firing a cap containing the detonating compound which in turn sets off the explosive charge.
- (z) Safety switch means a sectionalizing switch that also provides shunt protection in blasting circuits between the blasting switch and the shot area.
- (aa) Secretary means the Secretary of Labor or his delegate.

[36 FR 9364, May 22, 1971, as amended at 43 FR 12320, Mar. 24, 1978]

Subpart B—Qualified and Certified Persons

§ 77.100 Certified person.

- (a)(1) The provisions of this Part 77 require that certain examinations and tests be made by a certified person. A certified person within the meaning of these provisions is a person who has been certified in accordance with the provisions of paragraph (b) of this \$77.100 to perform the duties, and make the examinations and tests which are required by this Part 77 to be performed by a certified person.
- (2) A person who has been so certified shall also be considered to be a qualified person within the meaning of those provisions of this Part 77 which require that certain examinations, tests and duties be performed by a qualified person, except those provisions in Subparts F, G, H, I, and J of this part relating to performance of electrical work.
- (b) Pending issuance of Federal standards, a person will be considered, to the extent of the certification, a certified person to make examinations, tests and perform duties which are required by this Part 77 to be performed by a certified person:
- (1) If he has been certified for such purpose by the State in which the coal mine is located; or
- (2) If this person has been certified for such purpose by the Secretary. A person's initial certification is valid for as long as the person continues to satisfy the requirements necessary to